

Amendments to the Claims:

1. (CURRENTLY AMENDED) A crosstalk and EME (electromagnetic emission) minimizing trace suspension assembly structure comprising:

multiple write lines which are connected ~~crossed~~ between a preamplifier connection point and slider write contact pads;

multiple read lines driven by preamplifier circuits;

said slider write contact pads, which connect said write lines to said trace suspension assembly structure;

slider read contact pads, which connect said read lines to said trace suspension assembly structure; and

multiple write lines driven by preamplifier circuits,

wherein said multiple ~~read~~ write lines which are crossed half-way between said ~~preamplifier connection point and said slider write contact pads~~ are used to cancel out time-delayed (transmission line effects) parts of said crosstalk and said EME,

wherein a single crossing point of said write lines between said preamplifier connection point and said slider write contact pads is placed halfway between said preamplifier connection point and said slider write contact pads, can be used in order to cancel out said crosstalk and said EME,

wherein said write lines have parasitic capacitance between the write lines and the read lines,

wherein said parasitic capacitances between the write lines and read lines are used to cancel crosstalk, E-field, noise between said write lines and said read lines

wherein said read lines are crossed so that the average distance from each said write line to each said read line is equal.

wherein if said two write lines carry completely unrelated signals, each said read line gets an equal dose of disturbance on each of said write lines,

wherein each differential noise pickup detected on said read lines will eliminate capacitive pickup on said read lines.

2. (CANCELED)

3. (PREVIOUSLY PRESENTED) The crosstalk and EME minimizing structure of claim 1 wherein a crossing point of said write line is made by the addition of a metallization layer onto said trace suspension assembly structure.

4. (ORIGINAL) The crosstalk and EME minimizing structure of claim 1 wherein multiple crossing points of said write lines are used to further cancel out time-delayed (transmission line effects) parts of said crosstalk and EME.

5. (CANCELED)

6. (CANCELED)

7-18. Canceled

19. (CURRENTLY AMENDED) A method of minimizing crosstalk and EME

(electromagnetic emission) in a trace suspension assembly structure comprising the steps of:

providing multiple write lines which are connected ~~crossed~~ between a preamplifier connection point and slider write contact pads;

providing multiple read lines driven by preamplifier circuits;

providing said slider write contact pads, which connect said write lines to said trace suspension assembly structure;

providing slider read contact pads, which connect said read lines to said trace suspension assembly structure; and

providing multiple write lines driven by preamplifier circuits,

wherein said multiple read ~~write~~ lines which are crossed half-way ~~between~~ said ~~preamplifier connection point and said slider write contact pads~~ are used to cancel out time-delayed (transmission line effects) parts of said crosstalk and said EME,

wherein a single crossing point of said write lines between said preamplifier connection point and said slider write contact pads is placed halfway between said preamplifier connection point and said slider write contact pads, can be used in order to cancel out said crosstalk and said EME,

wherein said write lines have parasitic capacitance between the write lines and the read lines,

wherein said parasitic capacitances between the write lines and read lines are used to cancel crosstalk, E-field, noise between said write lines and said read lines,

wherein said read lines are crossed so that the average distance from each said write line to each said read line is equal.

wherein if said two write lines carry completely unrelated signals, each said read line gets an equal dose of disturbance on each of said write lines,

wherein each differential noise pickup detected on said read lines will eliminate capacitive pickup on said read lines.

20. (CANCELED)

21. (PREVIOUSLY PRESENTED) The method of minimizing crosstalk and EME of claim 19 wherein a crossing point of said write line is made by the addition of a metallization layer onto said trace suspension assembly structure.

22. (ORIGINAL) The method of minimizing crosstalk and EME of claim 19 wherein multiple crossing points of said write lines are used to further cancel out time-delayed (transmission line effects) parts of said crosstalk and EME.

23. (CANCELED)

24. (CANCELED)

25-36. Canceled